
NEWSLETTER

January-February 2009

This Issue's Featured Estimating Tip Stimulus and Funding Impacts on Estimating

Project cost estimating data provided by the
Utah Department of Transportation Engineering Services Division

There has been a great deal of economic uncertainty lately. UDOT placed 50 projects worth approximately \$4 billion on hold due to the slow economy and reduced state revenues last November. This coupled with a construction market slowdown has resulted in favorable bids the past 2-3 months. There has been significant news lately regarding a federal stimulus package with money directed to states to put people to work on infrastructure projects and the removal of the hold status for most of the 50 projects. This will have an impact on estimating and prices over the next several months.

Improved estimating accuracy during this economic slowdown will help efficiently use stimulus money and other funding resources and help get the most "bang for the buck." Estimating accurately over the past several years has been difficult and it will continue to be difficult. Estimators should continue to use all available tools to make the most of project funding. Utah had a 22 percent decline in construction employment between December 2007 and December 2008. Getting the most work done for the money available helps keep people in the state employed and provides value for the taxpayer through improved infrastructure. The depressed market has resulted in increased competition and lower prices that allow funding to go farther.

We all remember a couple of years ago when prices were increasing by the minute. Back then it was difficult to get projects awarded. There was a significant amount of frustration on bid opening day for the estimators and the contractors when projects were unable to be awarded. Estimates have been consistently higher than the low bid recently. For example, the low bid was 86.8 percent of the Engineer's estimate in 2008. During the fourth quarter of 2008, the low bid was 75.8 percent of the Engineer's estimate. The average low bid in January 2009 was 69.8 percent of the Engineer's estimate. These percentages suggest that prices are good and Engineer's estimates can be lower.

Lump items can be extremely difficult to estimate. Typically mobilization has been 10 percent of the project bid. Mobilization has averaged 7.5 percent of the project bid during the last 3 months. Traffic control is typically 5 percent and maintenance of traffic and survey are approximately 1 percent of bids.

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Estimating tips are available in the October – December 2008 newsletter available on the UDOT web page at <http://udot.utah.gov/main/f?p=100:pg:::1:T,V:1624>,. These tips can help increase estimate accuracy. Try to avoid the tendency to be overly conservative.

Additive Bidding

Additive bidding is a tool available to help get the most work done within a project budget. This is useful when a designer is uncertain about prices and market volatility. Items of work can be separated and bid as an additives to the base project if a project budget appears short. Look for items that can be easily separated and will not affect the overall function of the project if they are not awarded. Look for additional items that will add value to a project if there appears to be excess budget as design nears completion. Additives should be fairly easy to bid since contractors will be spending time and resources to produce bids for all items. Examples additives can be lining culverts, easily replaceable signs, and right-of-way fence. Remember to add value, not just spend the money. Guidelines for using additive bidding can be found at the above web link.

Asphalt Update

There continues to be a limited number of suppliers for UDOT PG graded binder. At least one supplier has already sold its entire current inventory. Expect a volatile market similar to 2008 for HMA and asphalt binder. Prices already appear to be creeping up. Watch recent bid openings and contact contractors on your projects. A good price for a large (over 20,000 tons) easy-to-pave project is \$70 to \$80 per ton. Very large projects might be less and projects with quantities less than 20,000 tons should be \$85 to \$120 depending on quantity, work difficulty, and location. Some small projects (less than 1000 tons) or projects consisting of difficult work like patching or narrow widening could be over \$120. Remember to look at recent bids when determining the estimate price for HMA and call contractors to ask about pricing.

Red Flags

It is recommended that red flags for materials, schedule, and plan holders be negated for the next month due to the recent favorable bidding environment. The red flag analysis tool can also be used to add negative flags as well as positive ones. Use the manual flag option on the red flag analysis to reduce the overall estimate if you feel that your estimate is conservative. Remember to lower item prices in PDBS to get the desired reduction. The red flag form is an excellent tool that serves as a reminder of issues that impact prices. Please continue to complete the form and use it to assist in assessing these factors and the effect they have on estimates. Contact David Osborn (801) 965-4708 or Jason Henrie (801) 957-8605 if you need estimating guidance.

Construction Cost Trends and Economic Information

Stimulus legislation expected to be considered by the U.S. House of Representatives includes approximately \$149 billion of funding to be obligated by September 30, 2009 for infrastructure and public building investment according to a tabulation by AGC. Transportation infrastructure (\$44 billion) includes \$30 billion for highway and bridge construction.

The producer price index (PPI) for inputs to construction industries slumped 2.5 percent in December and finished the year only 2.7 percent higher than a year earlier compared to a 4.8 percent rise in 2007. The rise was the smallest since 2003. The PPI for highway and street construction tumbled 5.4 percent for January and 0.8 percent for 2008 and heavy construction was down 3.5 percent for January.

The Data DIGest, 1/13-26/09

Public spending climbed 1.4 percent in October and 7.9 percent in November. Highways and Streets were among the largest nonresidential categories and rose 1.3 percent in October and 7.7 percent in November. These increases seem sure to reverse.

Declines are forecast for many construction materials. ENR forecasts decreases from December 2008 to December 2009 of 1.7 percent for cement, 3.5 percent for 2×4 lumber, and 10.3 percent for structural steel.

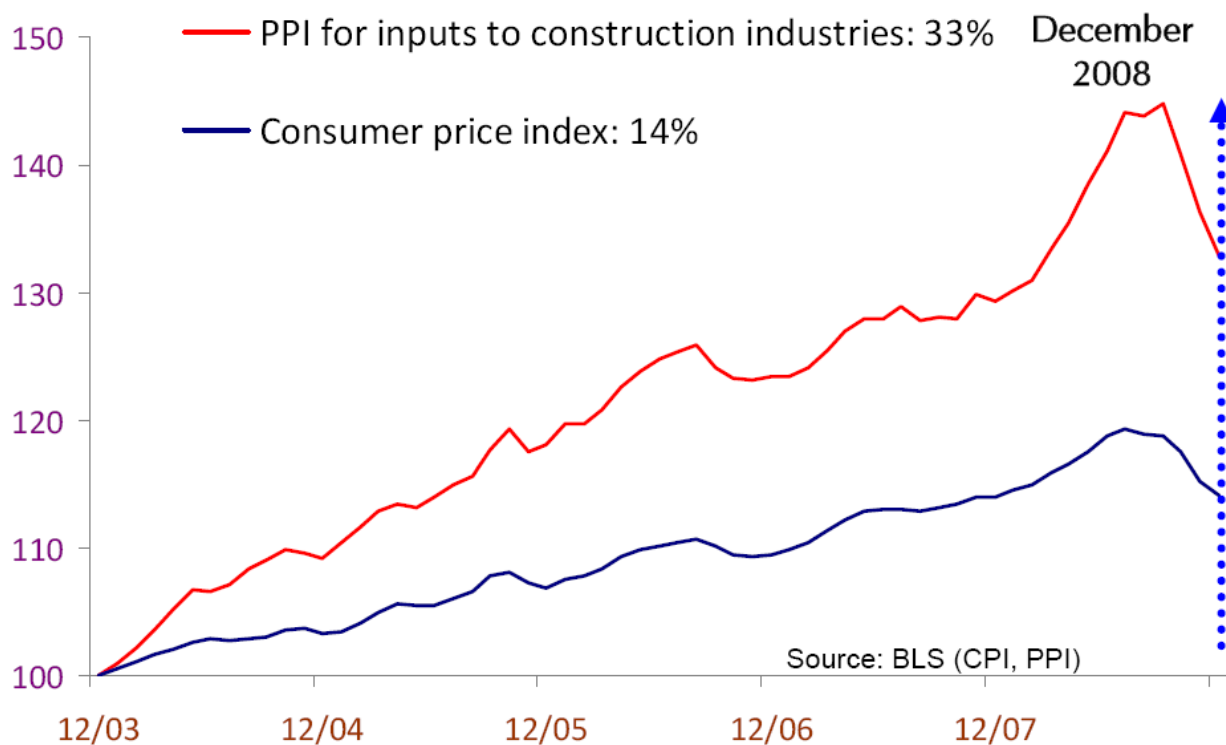
The Data DIGest, 1/6/09

Cumulative Change in Consumer and Construction Prices

(All PPIs = 100 in 12/03)

AGC of America (December 2003 = 100)

2003 – 2008

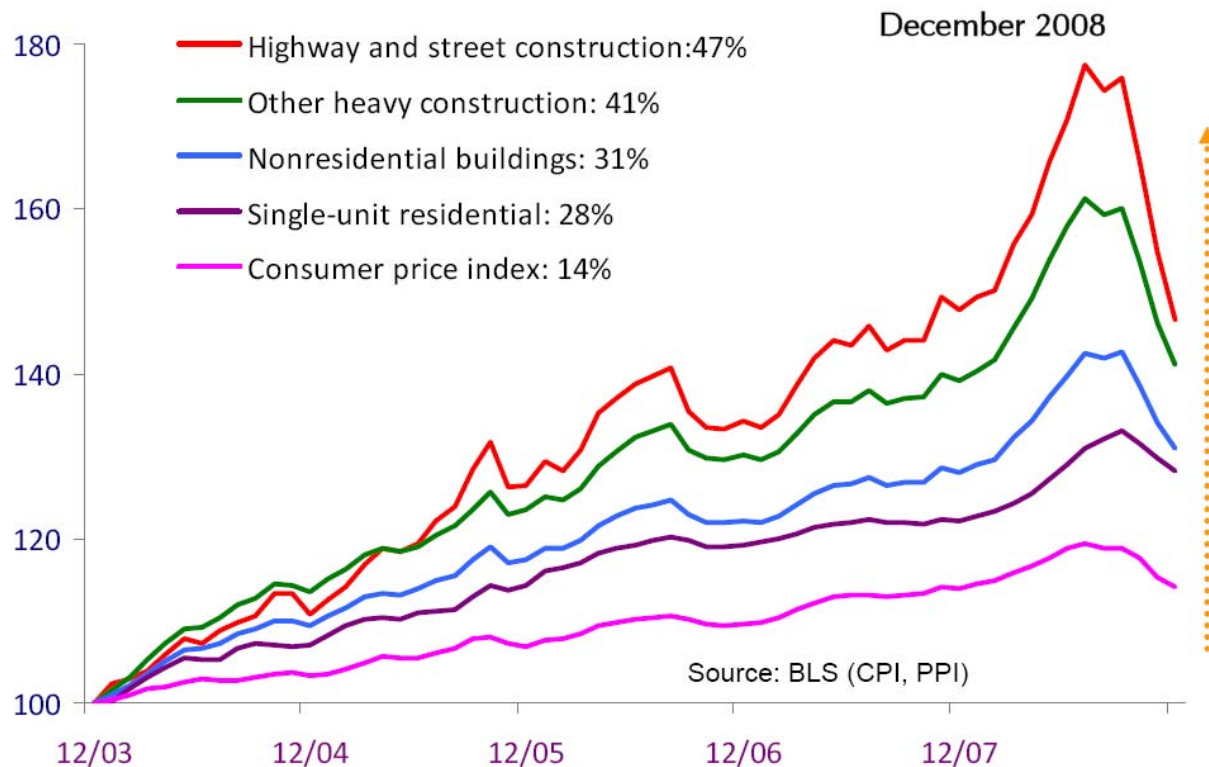


Cumulative Change in Producer Price Index (PPI) for Construction Types

(All PPIs = 100 in 12/03)

AGC of America

2003 – 2008

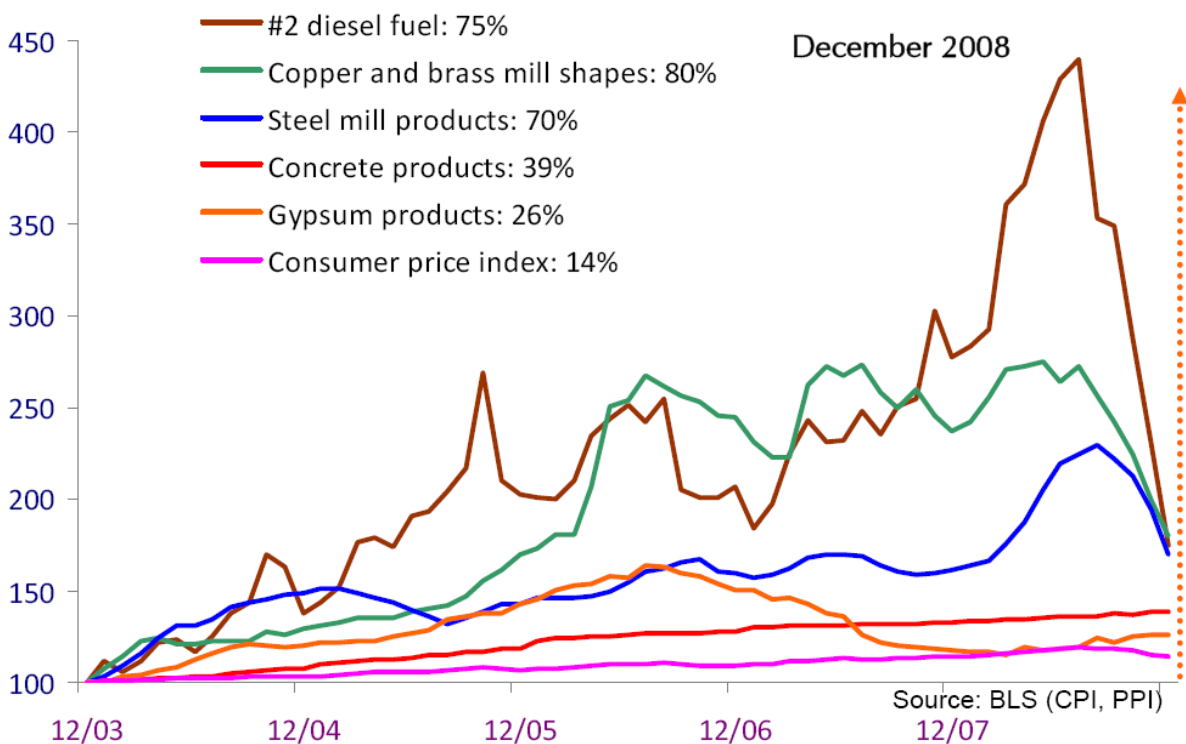


Cumulative Change in Producer Price Index (PPI) for Highway Inputs

(All PPIs = 100 in 12/03)

AGC of America

2003 – 2008



Rising Prices

Asphalt prices are dropping but not as far as diesel prices. The price index that the New Mexico Department of Transportation issued on December 29, for liquid asphalt for January was \$706 per ton, down 7.5 percent from December and 17 percent from its peak in August.

Economic consultants forecast price changes for 2009 as a whole compared to 2008:

Asphalt +5.4 percent vs. +22.5 percent in 2008

Cement -2.3 percent vs. +5.0 percent in 2008

The Data DIGest – 1/6/09

Percentage Changes in Producer Price Indexes for 2001-2008

Item	2001	2002	2003	2004	2005	2006	2007	2008	November 2008 to December 2008
Concrete Products	2.5	-0.3	1.5	7.6	10.1	8.1	3.8	4.2	0.0
Diesel Fuel	-44.7	54.4	13.0	37.9	46.7	2.3	33.9	-36.9	-23.7
Highway and Street Construction	-3.6	1.0	2.6	10.8	14.1	6.2	10.1	-0.8	-5.4

Bureau of Labor Statistics, AGC of America, 1/22/09

Crude Oil

Energy Information Administration (www.eia.doe.gov) reported that the national average retail price of on-highway diesel fuel was \$2.29 per gallon, a drop of 3.6 cents from a week before, 32 percent from a year earlier, and 52 percent from the record set on July 14, 2008. Diesel is used in construction for earthmoving and other off-road equipment such as concrete mixers and pumpers and dump trucks and is an important component of the cost of producing and delivering many materials.

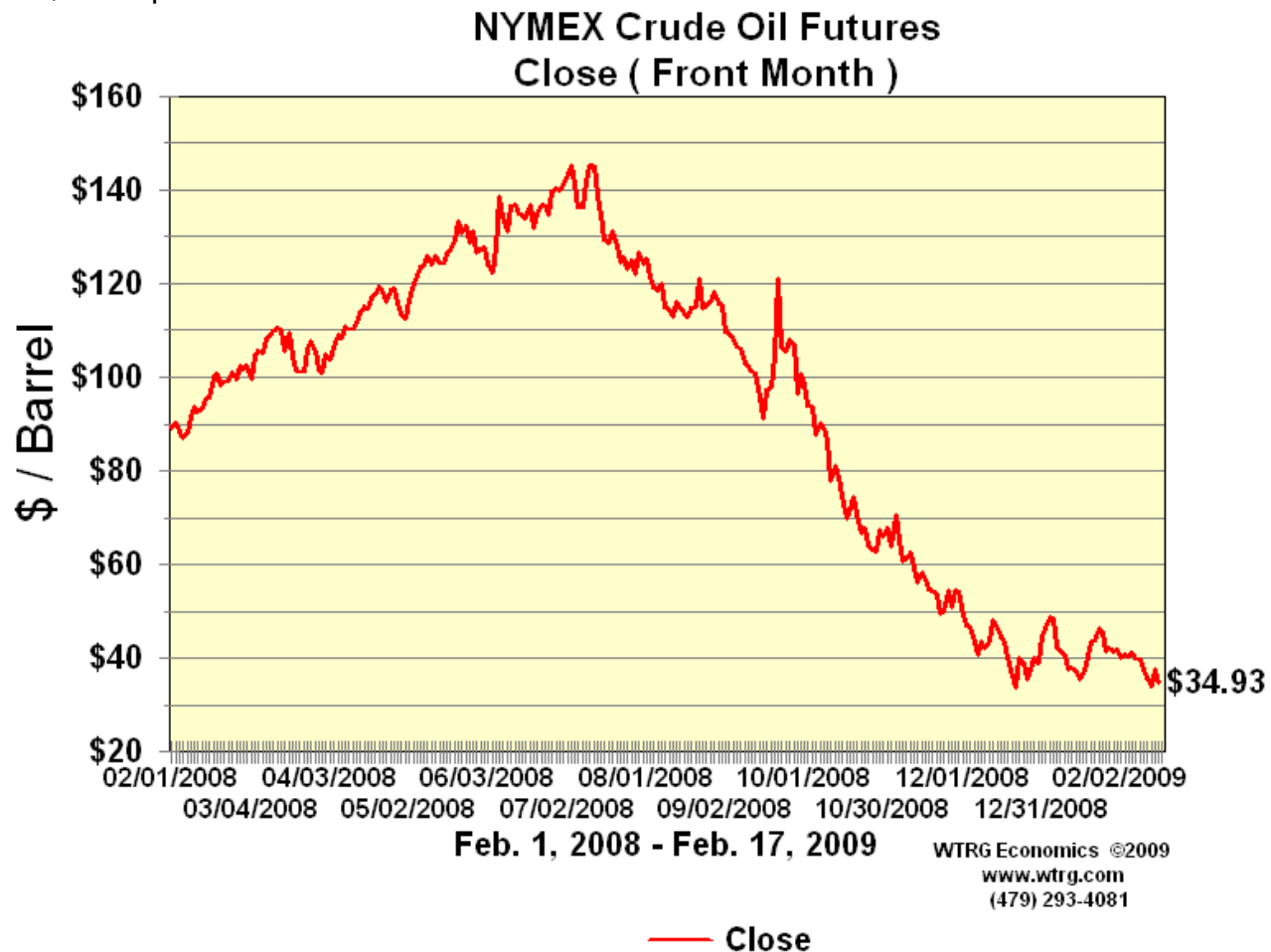
The Data DIGest – 1/6/09

Percentage Changes in Producer Price Indexes for 2001-2008

Item	2001	2002	2003	2004	2005	2006	2007	2008	November 2008 to Present
Crude Oil – Domestic Production	- 42.4	+60.6	+14.3	+30.5	+49.6	+0.1	+51.7	- 57.9	- 31.0

Bureau of Labor Statistics, AGC of America, 1/22/09

February 17, 2009, NYMEX West Texas Intermediate for March delivery closed down \$2.58 at \$34.93 per barrel.

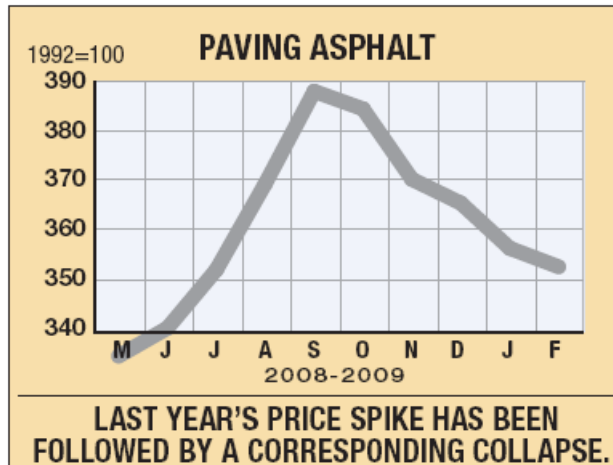


Asphalt

The price of liquid asphalt used in making bituminous concrete for highway paving could not resist the dramatic drop in crude oil prices. The ENR average price for PG 58 liquid asphalt fell another one percent this month as the price of crude oil has fallen from the record levels of last summer, marking the fifth consecutive monthly decline from the peak of last September. The year-to-year price increase has fallen from a 22 percent annual increase last September to a 10 percent annual increase at the start of February 2009.

ENR- 2/2/09

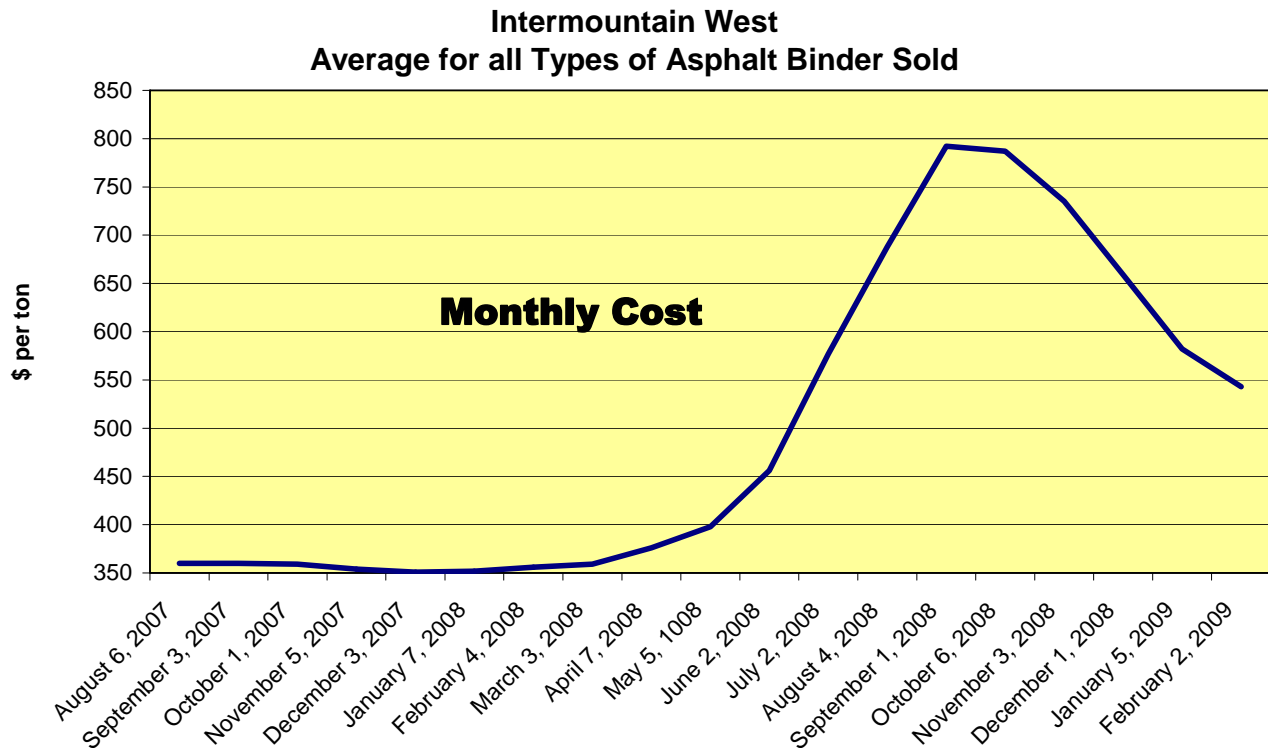
Economic consultants forecast price changes for 2009 as a whole compared to 2008:
Asphalt 5.4 percent vs. 22.5 percent in 2008



Percentage Changes in Producer Price Indexes for 2001-2008

Item	2001	2002	2003	2004	2005	2006	2007	2008	November 2008 to Present
Asphalt at Refinery	-	-	10.0	18.3	17.8	34.9	-0.2	48.3	- 20.0

Bureau of Labor Statistics, AGC of America, 1/22/09



Produced by Utah Department of Transportation Materials Division.
Based on information from Asphalt Weekly Monitor and Argus Report.

Note: This graph is intended to show the direction of asphalt binder costs and not actual costs for asphalt binder.

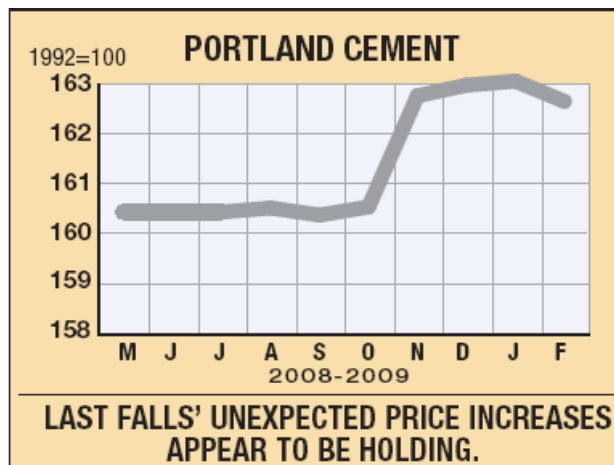
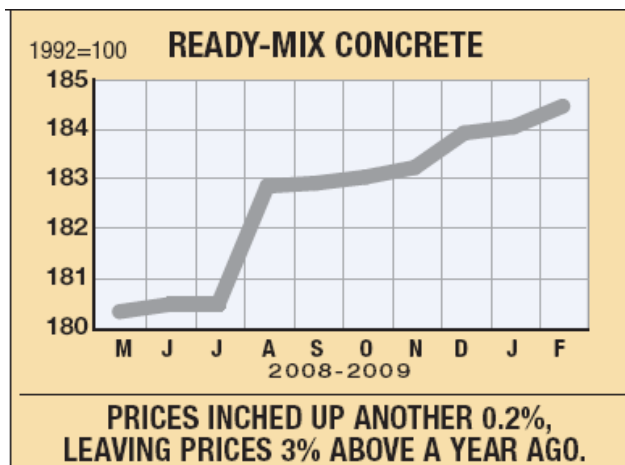
Cement

Economic consultants forecast price changes for 2009 as a whole compared to 2008:
Cement 2.3 percent vs. 5.0 percent in 2008

The Data DIGest – 1/6/09

Unlike other construction materials that have experienced sharp price declines from the collapse in demand due to the housing depression, cement producers have shown a remarkable ability to moderate their prices. In October, the Bureau of Labor Statistics producer price index for cement was down just 1.9% for the year. Producers have been aggressive about cutting production and imports leading to the small declines.

ENR- 1/5/09



Percentage Changes in Producer Price Indexes for 2001-2008

Item	2001	2002	2003	2004	2005	2006	2007	2008	November 2008 to Present
Construction Sand/Gravel/ Crushed Stone	3.3	2.5	2.4	4.3	7.7	9.3	8.4	6.6	0.0
Cement	1.0	1.3	-1.1	7.9	12.2	10.5	4.4	-0.6	-0.5
Concrete Products	2.5	-0.3	1.5	7.6	10.1	8.1	3.8	4.2	0.0
Ready-Mix Concrete	2.5	-1.1	1.1	8.7	11.3	10.1	3.1	4.1	-0.1
Precast Concrete Products	0.7	0.3	2.5	6.0	6.0	4.7	4.7	4.5	0.3
Prestressed Concrete Products	5.3	1.8	-0.2	8.2	14.3	4.9	2.2	4.6	0.0

Bureau of Labor Statistics, AGC of America, 1/22/09

Pipe

Prices for construction pipe are showing a wide swing. Ductile iron pipe prices are still riding the surge in steel costs during the first half of 2008. The ENR 20-city average price for 8 inch DIP in February is up 10 percent over a year ago. On the other hand, falling oil prices and weak demand have cut prices for 8 inch PVC water pipe by 1.4 percent since February 2008.

ENR - 2/9/09

Economic consultants forecast price changes for 2009 as a whole compared to 2008:

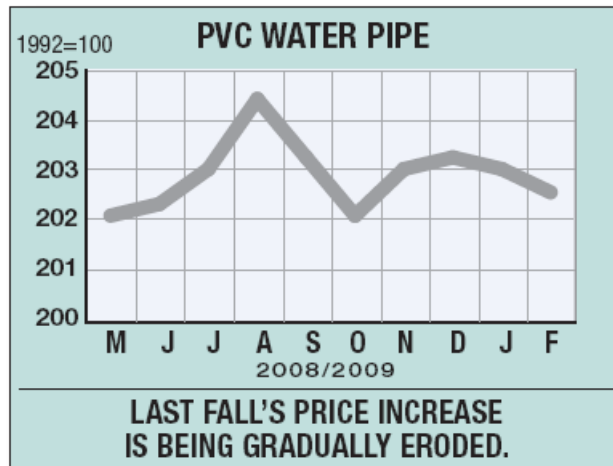
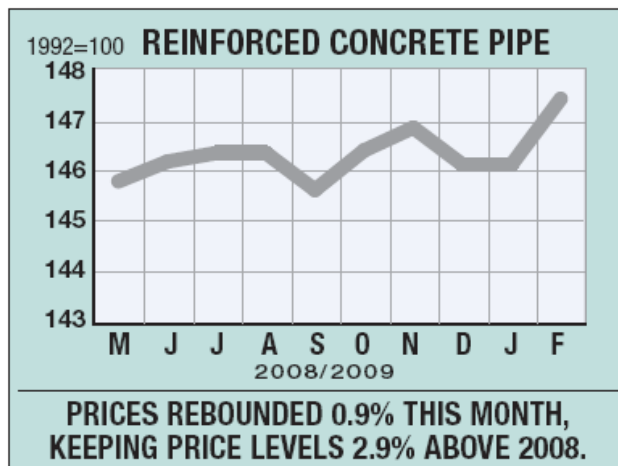
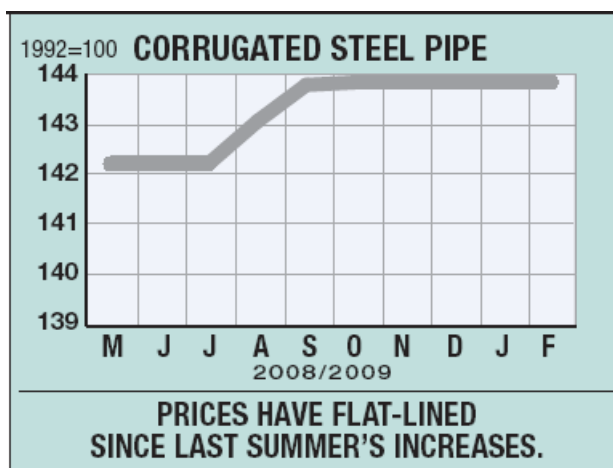
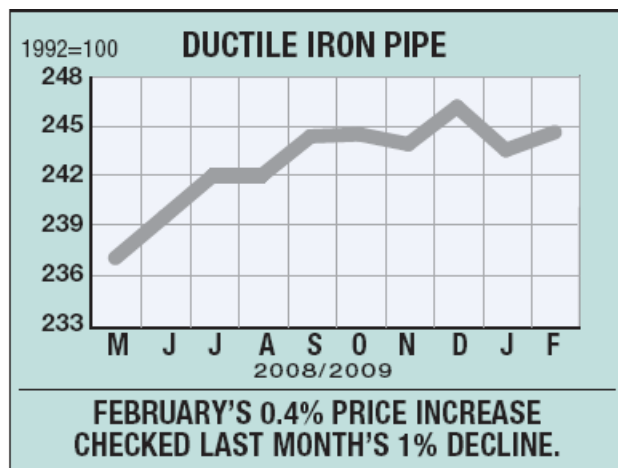
Fabricated Pipe

-3.6 percent vs. 7.7 percent

The Data DIGest – 1/6/09

Prices for most construction pipe products moderated in the last few months but year-to-year increase still reflect price increases during the first half of 2008. Prices 8 inch diameter ductile iron pipe fell 1.0 percent this month but remains 10 percent above the January 2008 level. The Bureau of Labor Statistics producer price index for fabricated pipe and fittings declined 0.8 percent last October but remains 13 percent above a year ago.

ENR - 1/12/09



Percentage Changes in Producer Price Indexes for 2001-2008

Item	2001	2002	2003	2004	2005	2006	2007	2008	November 2008 to Present
Concrete Pipe	4.4	1.7	1.4	5.5	7.5	2.5	10.0	4.2	-0.1

Bureau of Labor Statistics, AGC of America, 1/22/09

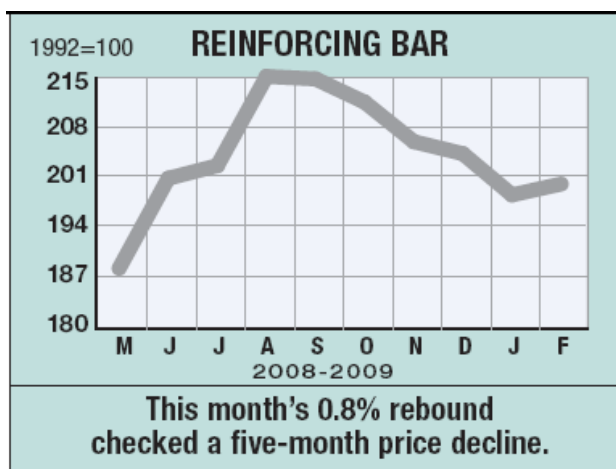
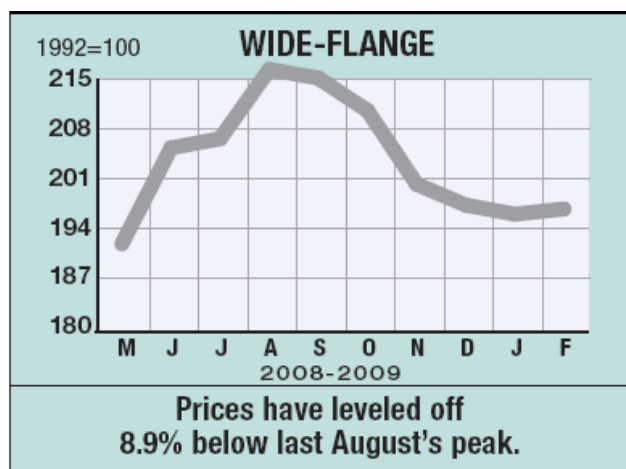
Steel

Structural and reinforcing steel prices paused in February after posting steep declines from last summer's peak. Prices rose to record levels last summer before being crushed by the unfolding economic crisis. The ENR 20-city average price for wide-flange, channel and I-beams fell 8.3 percent from last August's peak but still remain 9.1% above the February 2008 level. Prices for grade-60 rebar have declined 6.9 percent from their peak but remain 9.7 percent above a year ago.

ENR - 2/23/09

Economic consultants forecast price changes for 2009 as a whole compared to 2008:

Rebar	-28 percent vs. 37 percent in 2008
Structural Metal	0.5 percent vs. 10.5 percent in 2008
Structural Sheet	-2.3 percent vs. 14 percent in 2008
Structural Steel	-20 percent vs. 31 percent in 2008



Percentage Changes in Producer Price Indexes for 2001-2008

Item	2001	2002	2003	2004	2005	2006	2007	2008	November 2008 to Present
Steel Mill Products	-6.1	11.1	1.7	48.8	-3.8	11.6	0.9	5.3	-12.4
Hot-rolled Bars, Plates, and Structural Shapes	-4.3	2.1	11.3	53.8	-1.0	7.5	8.1	4.3	-7.4
Steel Pipe and Tube	-3.7	9.1	3.3	66.0	1.2	5.5	-1.3	28.6	-3.9
Fabricated Structural Metal	-1.3	-2.4	0.1	24.7	2.8	3.6	5.3	11.4	-1.2

Bureau of Labor Statistics, AGC of America, 1/22/09

Estimate Support

Do you have estimating questions? Call David Osborn at 801-965-4708 or Jason Henrie at 801-957-8605.

Do you know anyone who would like to receive the monthly Estimator's Corner Newsletter? Do you have a suggestion for something you would like researched for a future edition of the Estimator's Corner Newsletter? Your suggestions are welcome and make the information in the Newsletter more useful for the readers. Please send your suggestions, ideas, questions, and requests to estimatorscorner@utah.gov

Percentage Changes in Producer Price Indexes (PPIs) for Construction Materials and Components, 2001-2008

BLS Series ID		12 months through December--							to December 2008 since--				
		2001	2002	2003	2004	2005	2006	2007	11/08	9/08	12/07	12/03	
Table 1: Changes in Consumer, Producer & Construction Prices													
CUUR0000SA0	Consumer price index (CPI-U)	1.6	2.4	1.9	3.3	3.4	2.5	4.1	-1.0	-3.9	0.1	14.1	
WPUSOP3000	Producer price index (PPI) for finished goods	-1.6	1.2	4.0	4.2	5.4	1.1	6.2	-1.9	-7.3	-0.9	16.8	
PCUBCON	PPI for inputs to construction industries	-0.9	0.7	3.0	9.1	8.2	4.6	4.8	-2.5	-8.3	2.7	32.8	
PCUBHWY	PPI for inputs to highway and street construction	-3.6	1.0	2.6	10.8	14.1	6.2	10.1	-5.4	-16.7	-0.8	46.5	
PCUBHVV	PPI for inputs to other heavy construction	-2.6	1.0	2.6	13.4	8.8	5.5	6.9	-3.5	-12.0	1.4	41.0	
PCUBBLD	PPI for inputs to nonresidential buildings	-0.5	0.7	2.4	9.3	7.4	4.0	4.8	-2.4	-8.3	2.2	30.4	
PCUBRSM	PPI for inputs to multi-unit residential	-0.1	0.4	2.7	8.9	7.8	4.9	3.8	-1.7	-5.6	2.9	31.4	
PCUBRS1	PPI for inputs to single-unit residential	-0.4	0.6	3.5	7.0	6.9	4.2	2.5	-1.3	-3.7	4.9	28.2	
Table 2: Changes in PPIs for New Buildings and Components													
PCU236211	New industrial building construction	not available before 2008; series began 6/07							0.0	4.4	7.6	n.a.	
PCU236221	New warehouse construction	not available before 2005					7.5	8.1	4.5	-0.2	3.7	6.3	n.a.
PCU236222	New school construction	not available; series began 12/05					17.3	2.0	4.8	4.8	12.7	n.a.	
PCU236223	New office construction	not available; series began 6/06						4.8	-0.1	4.4	6.1	n.a.	
PCU23811X	Concrete contractors, nonresidential building work	not available; series began 12/07						0.2	2.4	5.0	n.a.		
PCU23816X	Roofing contractors, nonresidential building work	not available; series began 12/07						2.3	4.8	13.0	n.a.		
PCU23821X	Electrical contractors, nonresidential building work	not available; series began 12/07						0.9	2.8	5.1	n.a.		
PCU23822X	Plumbing contractors, nonresidential building work	not available; series began 12/07						1.4	3.8	9.2	n.a.		
Table 3: Changes in PPIs for Specific Construction Inputs													
WPU057303	#2 diesel fuel	-44.7	54.4	13.0	37.9	46.7	2.3	33.9	-23.7	-49.9	-36.9	74.8	
WPU05810112	Asphalt (at refinery)	not available			10.0	18.3	17.8	34.9	-0.2	-20.0	-44.6	48.3	178.1
WPU139401	Asphalt paving mixtures and blocks	0.9	2.0	3.7	4.3	14.3	27.6	1.6	-8.3	-12.3	33.3	106.3	
WPU136	Asphalt felts and coatings	4.6	-0.6	6.3	4.1	15.3	5.0	1.4	-1.1	2.7	51.7	93.9	
WPU1361	Prepared asphalt & tar roofing & siding products	5.0	-1.7	5.3	4.6	16.2	5.2	2.3	0.3	6.4	50.7	97.3	
WPU133	Concrete products	2.5	-0.3	1.5	7.6	10.1	8.1	3.8	0.0	0.8	4.2	38.6	
WPU1331	Concrete block and brick	2.3	1.6	3.2	4.7	8.1	6.8	3.3	0.3	0.9	4.6	30.2	
WPU1332	Concrete pipe	4.4	1.7	1.4	5.5	7.5	2.5	10.0	-0.1	-0.6	4.2	33.2	
WPU1333	Ready-mixed concrete	2.5	-1.1	1.1	8.7	11.3	10.1	3.1	-0.1	1.3	4.1	43.0	
WPU1334	Precast concrete products	0.7	0.3	2.5	6.0	6.0	4.7	4.7	0.3	-0.3	4.5	28.5	
WPU1335	Prestressed concrete products	5.3	1.8	-0.2	8.2	14.3	4.9	2.2	0.0	0.1	4.6	38.5	
WPU1342	Brick and structural clay tile	5.3	1.9	0.7	3.0	9.4	6.0	0.0	-0.2	0.3	0.3	19.8	
WPU072106	Plastic construction products	-2.7	3.1	3.2	7.2	21.6	-0.7	0.4	-1.5	-2.4	3.3	34.4	
WPU137	Gypsum products	0.4	3.4	2.8	20.0	18.8	5.5	-22.1	0.1	3.0	7.3	25.9	
WPU1392	Insulation materials	0.4	-1.5	2.0	8.6	2.6	2.1	-3.5	-0.2	1.5	1.0	10.9	
WPUSI004011	Lumber and plywood	-2.9	1.4	13.1	5.0	-1.1	-10.8	-0.7	-1.1	-7.2	-7.1	-14.0	
WPU062101	Architectural coatings	2.9	0.6	3.9	5.3	9.2	6.3	4.2	5.3	3.9	16.6	48.4	
WPU1017	Steel mill products	-6.1	11.1	1.7	48.8	-3.8	11.6	0.9	-12.4	-23.6	5.3	69.8	
WPU101704	Hot-rolled bars, plates, & structural shapes	-4.3	2.1	11.3	53.8	-1.0	7.5	8.1	-7.4	-24.4	4.3	84.5	
WPU101706	Steel pipe and tube	-3.7	9.1	3.3	66.0	1.2	5.5	-1.3	-3.9	-6.4	28.6	125.0	
WPU102502	Copper and brass mill shapes	-9.5	-1.6	11.6	29.6	31.0	44.4	-3.0	-9.6	-25.9	-24.3	79.8	
WPU102501	Aluminum mill shapes	-2.9	-0.9	-0.5	9.9	5.0	12.7	-1.7	-4.9	-10.5	-5.9	20.2	
WPU1073	Sheet metal products	-0.8	2.0	0.6	15.2	0.4	6.5	0.2	-1.5	-2.7	7.8	33.0	
WPU107405	Fabricated structural metal	-1.3	-2.4	0.1	24.7	2.8	3.6	5.3	-1.2	-4.1	11.4	55.8	
WPU10740501	Fabricated structural metal for buildings	-1.5	-3.3	-0.1	20.0	3.1	3.3	4.7	-0.6	-4.9	7.6	44.0	
WPU107408	Architectural and ornamental metalwork	-0.1	3.7	0.7	23.5	3.1	4.9	2.0	-0.5	-1.2	22.8	67.4	
WPU107409	Fabricated iron & steel pipe, tube, & fittings	0.6	0.1	1.2	32.6	5.5	-2.8	-1.5	0.2	-1.7	12.3	50.4	
WPU1076	Fabricated steel plate	0.6	-1.0	0.6	7.6	0.6	8.6	5.7	0.0	-4.2	23.2	53.2	
WPU1079	Prefabricated metal buildings	0.0	4.0	-0.7	35.5	2.0	5.5	2.0	-1.0	-3.5	25.0	86.0	
WPU112	Construction machinery and equipment	-0.1	1.9	1.3	6.0	4.9	3.6	2.3	0.2	1.8	5.3	24.0	
Table 4: Changes in PPIs for Basic Inputs Important to Construction													
WPU056	Crude petroleum (domestic production)	-42.4	60.6	14.3	30.5	49.6	0.1	51.7	-31.0	-64.4	-57.9	24.7	
WPU0553	Industrial natural gas	-36.7	12.2	20.3	20.1	31.5	-13.2	-2.8	-1.4	-9.4	4.3	39.0	
WPU066	Plastic resins and materials	-9.8	9.2	6.4	28.6	10.8	-7.8	9.7	-9.4	-17.0	-5.6	36.0	
WPU1321	Construction sand/gravel/crushed stone	3.3	2.5	2.4	4.3	7.7	9.3	8.4	0.0	0.6	6.6	41.9	
WPU1322	Cement	1.0	1.3	-1.1	7.9	12.2	10.5	4.4	-0.5	0.3	-0.6	38.7	
WPU1011	Iron ore	1.5	-1.3	1.6	6.7	15.5	7.5	1.3	0.0	0.0	12.1	50.5	
WPU1012	Iron and steel scrap	-5.6	27.8	64.9	50.8	-10.8	2.9	29.4	13.8	-59.1	-40.7	6.3	
WPU101212	Stainless and alloy steel scrap	no data from 1996 until September 2006							-7.8	not available			
WPU102102	Copper ores	-19.6	3.6	37.4	65.1	39.3	53.1	-1.7	not available				
WPU102301	Copper base scrap	-17.4	11.2	30.7	34.5	51.9	50.0	3.1	-5.1	-56.7	-52.7	49.4	

Updated 01/22/09 Source: Bureau of Labor Statistics (BLS): www.bls.gov/cpi for CPI, www.bls.gov/ppi for PPIs

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